



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2015-8257; Directorate Identifier 2015-NE-36-AD]

RIN 2120-AA64

Airworthiness Directives; Turbomeca S.A. Turboshift Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for all Turbomeca S.A. MAKILA 2A and MAKILA 2A1 turboshaft engines. This proposed AD was prompted by two occurrences of crack initiation on a ferrule of the diffuser. This proposed AD would require repetitive diffuser inspections and replacement of those diffusers that fail inspection. We are proposing this AD to prevent rupture of the ferrule of the diffuser, which could result in engine fire and damage to the helicopter.

DATES: We must receive comments on this proposed AD by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.
- Mail: Docket Management Facility, U.S. Department of Transportation, 1200 New Jersey Avenue SE., West Building Ground Floor, Room W12-140, Washington, DC 20590-0001.

- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

- Fax: 202-493-2251.

For service information identified in this proposed AD, contact Turbomeca S.A., 40220 Tarnos, France; phone: (33) 05 59 74 40 00; fax: (33) 05 59 74 45 15. You may view this service information at the FAA, Engine & Propeller Directorate, 1200 District Avenue, Burlington, MA 01803. For information on the availability of this material at the FAA, call 781-238-7125.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2015-8257; or in person at the Docket Operations office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the mandatory continuing airworthiness information (MCAI), the regulatory evaluation, any comments received, and other information. The address for the Docket Office (phone: 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Brian Kierstead, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 1200 District Avenue, Burlington, MA 01803; email: brian.kierstead@faa.gov; phone: 781-238-7772; fax: 781-238-7199.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2015-8257; Directorate Identifier 2015-NE-36-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD based on those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact with FAA personnel concerning this proposed AD.

Discussion

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community, has issued EASA AD 2015-0209, dated October 16, 2015 (referred to hereinafter as “the MCAI”), to correct an unsafe condition for the specified products. The MCAI states:

Two occurrences of crack initiation were reported on a ferrule of diffuser part number (P/N) 0298210100, which propagated and led to the ferrule rupture. The investigation shows in both cases that the ruptured ferrule contacted and punctured the main fuel supply line, resulting in a fuel leak. This condition, if not detected and corrected, could lead to an engine fire, consequently triggering an uncommanded engine in flight shut down, possibly resulting in an emergency landing. Prompted by these occurrences, Turbomeca

published Mandatory Service Bulletin (MSB) No. 298 72 2832 to provide repetitive inspection instructions.

This proposed AD would require repetitive inspections of the affected diffuser and removal of those diffusers that fail the required inspection. You may obtain further information by examining the MCAI in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2015-8257.

Related Service Information under 1 CFR Part 51

Turbomeca S.A. has issued Alert Mandatory Service Bulletin (MSB) No. A298 72 2832, Version B, dated October 12, 2015. The Alert MSB describes procedures for repetitive inspections of the affected diffuser and depending on findings, accomplishment of the corrective action(s).

Turbomeca S.A. has issued Service Bulletin (SB) No. 298 72 2833, Version A, dated July 29, 2015. The SB identifies post-TU52 HP gas generator modules that have been released with a new ferrule after repair or overhaul in a Repair Center. When applying Alert Mandatory Service Bulletin (MSB) No. A298 72 2832, it is necessary to know if an HP gas generator module released by a Repair Center is equipped with a new ferrule.

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section of this NPRM.

FAA's Determination and Requirements of This Proposed AD

This product has been approved by the aviation authority of France, and is approved for operation in the United States. Pursuant to our bilateral agreement with the

European Community, EASA has notified us of the unsafe condition described in the MCAI and service information referenced above. We are proposing this AD because we evaluated all information provided by EASA and determined the unsafe condition exists and is likely to exist or develop on other products of the same type design. This proposed AD would require repetitive inspections of the affected diffuser and depending on findings, accomplishment of the corrective action(s).

Costs of Compliance

We estimate that this proposed AD affects 10 engines installed on helicopters of U.S. registry. We also estimate that it would take about 2 hours per engine to comply with this proposed AD. The average labor rate is \$85 per hour. Based on these figures, we estimate the cost of this proposed AD on U.S. operators to be \$1,700.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska to the extent that it justifies making a regulatory distinction, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

Turbomeca S.A.: Docket No. FAA-2015-8257; Directorate Identifier 2015-NE-36-AD.

(a) Comments Due Date

We must receive comments by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to Turbomeca S.A. MAKILA 2A and MAKILA 2A1 turboshaft engine models with a high-pressure (HP) gas generator module (M03) that has modification (mod) TU 52 installed.

(d) Reason

This AD was prompted by two occurrences of crack initiation on a ferrule of the diffuser, which propagated and led to the ferrule rupture. We are issuing this AD to prevent rupture of the ferrule of the diffuser, which could result in engine fire and damage to the helicopter.

(e) Actions and Compliance

Comply with this AD within the compliance times specified, unless already done.

(1) Borescope inspect the centrifugal diffuser ferrule, part number (P/N) 0298210100, prior to the ferrule accumulating 700 hours, time since new or time since replacement or within 30 hours from the effective date of this AD, whichever is later. Use

Accomplishment Instructions, paragraphs 2.4.1 through 2.4.2.2.1, of Turbomeca S.A. Alert Mandatory Service Bulletin (MSB) No. 298 72 2832, Version B, dated October 12, 2015, to do the borescope inspections required by this AD.

(2) Repeat the borescope inspection required by this AD every 50 hours since last inspection.

(3) If any crack, loss of contact between the ferrule and diffuser axial vane, or any contact between the injection manifold supply pipe and the diffuser ferrule is found, remove the diffuser case and replace the ferrule with a part eligible for installation.

(f) Credit for Previous Actions

You may take credit for the actions required by paragraph (e) of this AD if you performed Turbomeca S.A. MSB No. 298 72 2832, Version A, dated September 3, 2015 before the effective date of this AD.

(g) Alternative Methods of Compliance (AMOCs)

The Manager, Engine Certification Office, FAA, may approve AMOCs for this AD. Use the procedures found in 14 CFR 39.19 to make your request. You may email your request to: ANE-AD-AMOC@faa.gov.

(h) Related Information

(1) For more information about this AD, contact Brian Kierstead, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 1200 District Avenue, Burlington, MA 01803; phone: 781-238-7772; fax: 781-238-7199; email: brian.kierstead@faa.gov;.

(2) Refer to MCAI European Aviation Safety Agency AD 2015-0209, dated October 16, 2015, for more information. You may examine the MCAI in the AD docket

on the Internet at <http://www.regulations.gov> by searching for and locating it in Docket No. FAA-2015-8257.

(3) Turbomeca S.A. Alert MSB No. A298 72 2832, Version B, dated October 12, 2015, can be obtained from Turbomeca S.A., using the contact information in paragraph (h)(5) of this proposed AD.

(4) Turbomeca S.A. Service Bulletin (SB) No. 298 72 2833, Version A, dated July 29, 2015, can be obtained from Turbomeca S.A., using the contact information in paragraph (h)(5) of this proposed AD.

(5) For service information identified in this proposed AD, contact Turbomeca S.A., 40220 Tarnos, France; phone: (33) 05 59 74 40 00; fax: (33) 05 59 74 45 15.

(6) You may view this service information at the FAA, Engine & Propeller Directorate, 1200 District Avenue, Burlington, MA 01803. For information on the availability of this material at the FAA, call 781-238-7125.

Issued in Burlington, Massachusetts, on February 29, 2016.

Colleen M. D'Alessandro,
Manager, Engine & Propeller Directorate,
Aircraft Certification Service.

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